



With the Compliments of the
Medical Officer of Health

Wolverhampton, ...



County Borough

of Wolverhampton.

REPORT

UPON THE

Health of Wolverhampton

FOR THE YEAR 1920

BY

HENRY MALET, B.A., M.D., B.Ch.,

Medical Officer of Health.

PRINTED BY ORDER OF THE HEALTH COMMITTEE.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30289403>

MEDICAL OFFICER'S REPORT,

1920.

Prevalence and Prevention of Infectious Disease.

Table 3 gives the weekly number of cases of certain diseases certified by Medical Men under the Infectious Diseases Notification Act, and of Phthisis under the Tuberculosis Regulations. Any certificate detected as erroneous before the close of the week is not entered.

Table 1 gives the total number of cases of some of the diseases about which enquiries were made and which were recorded; no erroneous cases are entered in this Table.

Measles.—Our mean annual deaths from Measles since 1884 are as follows :—

	1884-90	1891-1900	1901-10	1911-15	1916	1917	1918	1919	1920
Deaths	50·3	35·4	40·0	59·4	51	16	14	7	36

We had been singularly free from Measles during 1919, but in the first quarter of 1920 there was a considerable prevalence, mainly in the East Sub-District; in the second quarter the prevalence extended over the whole Borough, and was apparently heaviest in the West Sub-District; the following School Infants' Departments were closed for four weeks on June 5th, Bingley Street, Dudley Road, and Graiseley. During the third quarter the prevalence continued for some eight weeks, especially in the West; from then until the close of the year we were practically free from Measles.

Scarlet Fever.—We began recording our cases in 1884, but as we have only had notifications since 1890 (inclusive), the returns before that year are less complete than those since. The death records in my possession go back to 1870; the following are the average deaths since that year, and cases since 1884 :—

	1878-80	1881-90	1891-1900	1901-10	1911-15	1916	1917	1918	1919
Deaths	64·5	25·5	21·1	13·0	4·2	3	5	5	4
Cases	—	212·7	465·1	425·6	278·6	136	275	168	146
1920									
Deaths	7								
Cases	272								

There was slightly increased prevalence of Scarlet Fever in the Borough at the close of 1919; during the first quarter of 1920 this prevalence was more marked in the West Sub-District, and the type of the disease generally was much more severe. In the second and third quarters the type was again mild, and the prevalence more in the East. In the fourth quarter there was increased prevalence of the same mild type throughout the Borough, mostly in the West.

The following Table gives quarterly particulars as to the cases in the two Sub-districts. The deaths are those of the cases reported in each quarter, and sometimes occur later; they do not necessarily correspond to the deaths in the Mortality Tables, which are those registered in each quarter:—

Quarters.			1st	2nd	3rd	4th	Year
EAST	..	Total { Cases	22	42	29	36	129
		Deaths	2	1	1	..	4
	..	Hospital { Cases	22	42	27	33	124
		Deaths	2	1	1	..	4
	..	At Home { Cases	..	..	2	3	5
		Deaths	..	..	..	..	..
WEST	..	Total { Cases	53	23	19	48	143
		Deaths	3	..	..	..	3
	..	Hospital { Cases	49	21	15	39	124
		Deaths	3	..	..	..	3
	..	At Home { Cases	4	2	4	9	19
		Deaths	..	..	..	..	..

The East Mortality per case is 3·1 per cent; the West 2·1 per cent.

The case mortality in the Hospital is 2·8 per cent.

The following is a summary of the apparent effects of removal and home care on the spread of the infection in the households attacked during the year. No account is taken of houses where there is no sus-

ceptible child after the first case attacked ; children who have already had Scarlet Fever being counted as insusceptible, 'children' includes all under 18 years of age. Hospital removal was effected in 146 houses ; in which after the first removals, there remained 361 children. In 137 of these houses there was no recurrence after removal, 334 children escaping. In 9 houses there was recurrence, 14 children being attacked ; 8 of these were taken ill within three days of the previous removal, and probably infected before it, one was thirty days after the removal, and probably due to some independent infection ; leaving only 5 cases possibly due to failure of removal, or of disinfection. In these 9 houses 13 children still escaped infection.

Cases were kept at home in 22 houses ; in 15 of these the patient was the only susceptible child ; in 3 cases the other children were promptly sent away. In one case the patient's mother was taken ill after 16 days interval. In 3 cases there was no recurrence, 4 children escaping.

The following tabular statement shows the results at a glance—

			Hospital Removal.	Home Isolation.
Total Houses	..	..	146	4
Cases recurred in	..	..	9	1
Number of children after primary cases	..	..	361	5
Number subsequently attacked	..	..	14 or 3·9%	1 or 20%
Number possibly due to failure	..	..	5 or 1·4%	1 or 20%
Number of children escaping	..	..	347 or 96·1%	4 or 80%

The following is the total for the twenty-seven years, 1894—1920—

			Hospital Removal.	Home Isolation.
Total Houses	..	..	4789	530
Cases recurred in	..	..	450	159
Number of children after primary cases	..	..	12,230	982
Number of these attacked	..	..	561 or 4·6%	213 or 21·7%
Number possibly due to failure	..	..	284 or 2·3%	144 or 14·7%
Number of children escaping	..	..	11,669 or 95·4%	769 or 78·3%

A correction should be made against Hospital Statistics for what are called "return cases," that is, cases presumed to be infected by patients discharged from Hospital ; this year we had 13 such cases. During the past 27 years we have had a total of 371 return cases ; these with the 284 primary failures give 655 re-infections in 12,230 children after Hospital care, or 5·4%, compared with 14·7% for home isolation.

Whooping Cough.—There was slight prevalence of Whooping Cough during the first nine months of the year, but no appearance of an epidemic at any time.

Diphtheria.—The annual cases of, and deaths registered as due to Diphtheria in the Sub-Districts since 1890 have been :—

		1890	1891	1892	1893	1894	1895	1896	1897	1898
EAST	{ Cases ..	11	8	3	14	36	88	114	121	76
	{ Deaths..	2	1	2	2	20	29	21	21	18
WEST	{ Cases ..	12	25	13	21	46	220	246	190	126
	{ Deaths..	2	4	2	3	13	55	34	37	25
BOROUGH	{ Cases ..	23	33	16	35	82	308	360	311	202
	{ Deaths..	4	5	4	5	33	84	55	58	43
		1899	1900	1901	1902	1903	1904	1905	1906	1907
EAST	{ Cases ..	37	35	30	36	9	23	20	22	43
	{ Deaths..	12	4	7	12	2	7	3	7	8
WEST	{ Cases ..	68	60	76	55	37	55	66	74	117
	{ Deaths..	9	6	6	6	8	11	15	16	18
BOROUGH	{ Cases ..	105	95	106	91	46	78	86	96	160
	{ Deaths..	21	10	13	18	10	18	18	23	26
		1908	1909	1910	1911	1912	1913	1914	1915	1916
EAST	{ Cases ..	44	17	5	17	26	29	34	51	35
	{ Deaths..	12	3	..	2	8	3	5	4	4
WEST	{ Cases ..	116	39	26	31	24	42	79	87	87
	{ Deaths..	21	8	4	3	4	4	13	11	13
BOROUGH	{ Cases ..	160	56	31	48	50	71	113	138	122
	{ Deaths..	33	11	4	5	12	7	18	15	17
		1917	1918	1919	1920					
EAST	{ Cases ..	18	15	20	22					
	{ Deaths..	3	2	2	2					
WEST	{ Cases ..	39	41	38	25					
	{ Deaths..	4	3	..	1					
BOROUGH	{ Cases ..	57	56	58	47					
	{ Deaths..	7	5	2	3					

The prevalence keeps very low. Of the 22 East cases, 20 were removed to the General Hospital, 2 of these were fatal. Of the 25 West cases, 14 were removed, 1 of these was fatal.

During the year there were 170 Bacteriological Reports on Diphtheria from the Laboratory at the General Hospital. 94 of these from cases in the Hospital; 31 primary examinations, 14 positive, 17 negative; 63 second and subsequent examinations, 14 positive, 49 negative. There were 6 examinations from the Borough Hospital, 2 primary and 4 subsequent; all negative. The remaining 70 examinations were made for 19 doctors; 56 primary, 18 positive, 38 negative; 14 subsequent, 6 positive, 8 negative.

Enteric Fever.—The cases recorded and deaths registered since 1890 have been :—

		1890	1891-1900	1901-1910	1910	1911	1912	1913	1914	1915
EAST	{Cases	22	65·1	24·1	2	3	4	5	2	1
	{Deaths	6	12·9	5·2	..	1	1	..	3	..
WEST	{Cases	22	61·3	24·5	2	6	1	5	6	2
	{Deaths	3	12·1	4·7	1	1	..	4	..	1
BORO'	{Cases	44	126·4	48·6	4	9	5	10	8	3
	{Deaths	9	25·0	9·9	1	2	1	4	3	1
		1916	1917-18-19	1920						
EAST	{Cases	..	..	..						
	{Deaths	..	..	..						
WEST	{Cases	1	..	2						
	{Deaths	..	..	..						
BORO'	{Cases	1	..	2						
	{Deaths	..	..	..						

Although 1910 is included in the previous decade, its figures are repeated because of the sudden drop that year. Of the 2 cases this year 1 occurred in January, and was removed to the General Hospital; the other was in December and kept at home, Vidal examination was negative. Nothing was made out in either case.

There were three Bacteriological examinations made during the year, one from the Hospital, two for other doctors; all were negative.

Puerperal Fever.—Four cases were notified, all in the practice of midwives. Three were removed to the General Hospital, two of these were fatal; one case was kept at home. There were two cases of Scarlet Fever not yet notified, in the house where one case occurred; this was the case which was removed to Hospital and recovered.

Cerebro Spinal Meningitis.—Four cases were notified, all were removed to the General Hospital, and all were fatal. The first case, May 20th, was notified as Diphtheria, removed to the General Hospital, proved Meningitis and notified from Hospital; Meningococcus was not found; Pathologist considered case was due to Influenza. Second case, May 27th, Meningococcus was found. Third case, May 29th, Diplococcus, but no Meningococcus. There was no connection whatever between these cases. The fourth case occurred on August 5th, deposit of pus cells in C.S. fluid; Streptococcus, no Meningococcus.

Encephalitis Lethargica.—One case was notified, December 29th, ill on 19th, had been exposed to Influenza; "blood showed a short Streptococcus." Recovery was complete.

Ophthalmia Neonatorum.—15 cases were dealt with during the year; 11 were notified from the Eye Infirmary; 3 by doctors; one case was un-notified. All the cases were attended by the Health Visitors, all recovered except one in which the sight of one eye was lost, this baby died of acute Bronchitis when one month old.

Tuberculosis.—During the year we had 202 primary notifications on Form A; 193 of these were pulmonary. The new pulmonary cases reported in the two previous years were 1918, 287; 1919, 294; possibly the drop may be due to the cessation of cases due to the war; the figures for the three preceding years were 1915, 225; 1916, 227; 1917, 249; for five years there appears to have been a war rise. Of the above 193 pulmonary notifications, 65 were by private doctors; 104 by the Tuberculosis Officer; and 24 from other sources. There were further 19 notifications by the School Medical Officer on Form B; 11 of these were pulmonary. All the 204 pulmonary cases were inquired into, and a memo of the particulars forwarded to the Tuberculosis Officer; and nearly all cases not already under his care were referred to him. During the year there were 66 Bacteriological reports on cases of suspected Phthisis. 12 were on General Hospital cases, all negative; 54 were from 15 doctors, 8 were positive.

Diarrhœa.—The mean annual deaths registered as due to Diarrhœa since 1875 have been :—

1875-80	1881-90	1891-1900	1901-10	1911	1912	1913	1914	1915
85.3	84.5	126.0	81.8	99	30	118	91	49
		1916	1917	1918	1919	1920		
		62	32	28	46	27		

The annual figures previous to 1910 will be found in the 1914 report.

There has been no epidemic this year.

The following table gives the annual Diarrhoea deaths since 1911, and the weekly means of the 4ft deep earth temperature, the figures in the column after the second give the number of weeks in each year during which this temperature exceeded the degree at the head of the column. The figures for the previous decades are given in the 1910, 1903 and previous reports.

		Deaths	52°	53°	54°	55°	56°	57°	58°
1911	..	156	21	19	17	13	11	10	7
1912	..	30	18	15	13	8	5	..	..
1913	..	118	22	19	17	14	9	1	..
1914	..	91	22	20	17	15	12	10	2
1915	..	49	20	19	14	10	5	..	..
1916	..	62	17	15	13	8	6	3	..
1917	..	32	19	17	13	11	5	..	..
1918	..	28	20	17	12	12	6	2	1
1919	..	46	19	17	16	7	6	3	..
1920	..	27	21	19	14	8	..	..	..

The following gives similar figures for the 1ft. deep earth temperature, and also the annual rainfall :—

		Deaths	60°	61°	62°	63°	64°	65°	66°	Inches
1911	..	156	13	12	11	8	7	6	2	21·86
1912	..	30	4	3	2	1	1	..	..	34·42
1913	..	118	7	2	..	..	..	..	..	27·88
1914	..	91	13	8	6	2	..	..	..	28·98
1915	..	49	3	1	..	..	..	..	..	30·11
1916	..	62	5	5	3	2	2	1	..	26·48
1917	..	32	9	2	1	1	..	..	..	28·93
1918	..	28	9	4	1	..	..	..	..	29·39
1919	..	46	4	2	2	2	1	..	..	28·89
1920	..	27	..	..	..	..	..	..	..	31·49

The Diarrhoea fatality is more or less in direct ratio to the temperature and inverse ratio to the rainfall; but beyond these the disease is a marked index of the general sanitary condition of a district.

Influenza.—There was a mild outbreak towards the close of the first quarter, with some deaths from Pneumonia. During the rest of the year we were practically free from any except occasional cases.

Quarters.	Remaining in from previous Quarter.	Admitted.	Total Discharged	Died.	Average number of days in of the cases admitted	Average daily number of Patients in Hospital.
First ..	25	75 ^a	65	5	43·0	33·1
Second..	35	70	73	1	40·5	30·8
Third ..	32	45 ^b	53	1	40·9	23·1
Fourth	24	75 ^c	68	1	43·5	33·2
Year ..	25	265	259	8	42·1	30·0

- Leaving 31 cases in at the close of the year.

The following are the summaries of the cases admitted each quarter—

FIRST QUARTER.—75 cases were admitted, 5 were fatal:—A 20 years old, malaria, very severe case, continuous delirium, 7 days in. B, 4 years old, very severe septic case, cellulitis of neck, 3 days in. C, 5 years old, admitted with acute Nephritis and convulsions, 6 hours in. D, 24 years old, very severe septic case, 5 days in. E, 6 years old, developed Measles three days after admission, double Pneumonia, 13 days in. 9 other cases were very severe, and 6 were severe. Complications:—Otorrhœa, 11 cases. Rhinitis, 5 cases. Adenitis, 6 cases. Suppuration, 5 cases, 2 Mastoid. Skin Affections, 10 cases. Rheumatism, 1 case. Chorea, 1 case. Whooping Cough, 1 case. There was a very troublesome outbreak of Measles; 3 cases of Scarlet Fever were admitted on March 18th, one of these (the fatal case above) developed Measles on the 22nd, and was

immediately removed to another ward ; another of these children developed Measles on April 3rd ; and 5 children already in the ward had Measles on April 4th. A child admitted on March 22nd had Measles on April 14th. The third of the children admitted on March 18th had Measles on April 18th, and the tenth case was on April 28th, in a child admitted on February 28th. The type was very severe.

SECOND QUARTER.—70 cases were admitted ; 1 was fatal. A, 3 years old, severe septic case, 10 days in. 5 other cases were very severe, and 3 severe. Complications :—Otorrhœa, 2 cases. Rhinitis, 2 cases. Adenitis 2 cases. Suppuration, 1 case. Skin Affections, 6 cases. Rheumatism, 1 case. There was continued trouble with Measles ; on May 5th a child had Measles who had been in since April 16th, and was probably from the previous outbreak. On May 4th a case was admitted which proved to be Measles, and was at once removed ; but on May 23rd the child in the next cot had Measles. On May 12th another child came in with Measles but was at once sent to the separate ward. On June 7th, a child admitted on May 15th had Measles ; and the last case was on June 21st in a child admitted on May 26th.

THIRD QUARTER.—45 cases were admitted ; 1 was fatal. A, 8 years old, very severe septic case, cellulitis of neck, 12 days in. 6 other cases were very severe, and 7 severe. Complications :—Otorrhœa, 3 cases. Rhinitis, 4 cases. Adenitis, 4 cases. Suppuration, 1 case, an injury to leg before admission. Skin Affection, 1 case. Nephritis, 1 case. Rheumatism, 4 cases. There were 2 cases of Chicken Pox, A admitted August 27th, developed C.P. on September 30th. B admitted September 6th, played with A, developed C.P. October 12th.

FOURTH QUARTER.—75 cases admitted, 1 was fatal :—A 13 years old, very severe septic case, cellulitis of face and neck, 2 days in. 4 other cases were very severe, and 9 severe. Complications :—Otorrhœa, 7 cases, Rhinitis, 10 cases. Adenitis, 4 cases. Suppuration, 5 cases. Skin Affections, 10 cases. Rheumatism, 2 cases. We had an exceedingly troublesome outbreak of Mumps, there were 9 cases at the following dates Oct. 23rd, Nov 6th, 11th, 15th, 22nd, 23rd, Dec. 4th, 11th, Jan. 1st.

No patients were attended by their own doctors during the year.

The following Table gives the proportion of cases without definite signs of Scarlet Fever when seen after admission, and the results :

Quarters.	Admis- sions.	Indefinite when admitted.			
		Total.	Apparently not had Scarlet Fever.		
			Total.	Caught Scarlet Fever	Died.
First ..	75	6	3	..	..
Second ..	70	11	8	2	..
Third ..	45	6	1	..	..
Fourth ..	75	7	1	..	..
Year ..	265	30	13	2	..

Considering the difficulties under which many of the cases are seen at their homes the above 13 is a small percentage (less than 5) of error. It was fortunate that only 2 of the cases caught Scarlet Fever, and that both recovered.

Return Cases —251 cases returned to their homes from the Borough Hospital during the year; in 14 instances other cases occurred at their homes; 3 of these were evidently due to some other cause, as they occurred at intervals of 191, 122, and 119 days after the return of the first case. The details of the other 11 cases are as follows. A, was 40 days in the hospital, and 40 days ill, no complications in hospital, but some time after return home had a sore on the nose; 21 days after return another case occurred. B, 31 days in, 40 ill; no complications in hospital, but after return home had “running nose and sores behind ear,” on returning home slept with a child who had Scarlet Fever after 17 days. C, 49 days in, duration of illness uncertain; no complications before or since discharge; 15 days after return another case. D, 41 days in, 42 ill; no complications in hospital, but 13 days after return had nasal discharge, and the day after this another case occurred. E, 26 days in, 37 ill; no complications; 12 days after return another case occurred. F, 57 day in, 59 ill; severe impetigo cap, which recurred after return (all four children in

the house have Scabies); after 8 days another case occurred. G, 46 days in, 49 ill; septic case, had impetigo, which recurred slightly after return; slept with another child who had Scarlet Fever 7 days later. H, 41 days in, 42 ill; no complication, but had nasal discharge after return home; 4 days later another case occurred, and 2 days after that another. I, 55 days in, 56 ill; had otorrhœa; after return had a sore on the nose; after 4 days another case occurred. J, 38 days in, 42 ill: no complications; had adenoids; 4 days later there was another case. K, 39 days in, 43 ill; no complications; two other cases occurred, one 3 days, and one 6 days after K's return: K had nasal discharge 10 days after the return home. The above is very disappointing; 11 out of 251 cases (nearly 4·4 per cent.) apparently conveyed infection, causing 13 new cases. It is practically impossible to secure complete freedom from infection in cases discharged from sick wards; we advise some isolation of discharged patients for three weeks, but in poor homes this is impossible. Of the above 13 return cases 9 were in the East Sub-district, and only 4 in the West.

Vital Statistics.

The most outstanding feature in the year's statistics is the birth-rate, 30·2. Table No. 9 shows an alarming fall in 1911 and 1912, slightly checked in 1913, 1914; then a rapid decrease extending over five years; this latter was largely due to war conditions; and this year's high rate is due to the return of a number of men to their homes after the armistice, and probably too to a number of marriages at that time. The same birth-rate, 30·2, was recorded in 1905, and was then the lowest on record, since then there has been a rapid and almost continuous decline until this year's rebound. The increase (see Table No. 10) is most marked in the East Sub-district, where the rate is 38·1, the highest record since 1898. The West rate, 25·4, is the highest since 1909, but was always exceeded before that year.

The Infant death-rate (see Table No. 9) is not a bad one; considering the general conditions as regards poverty and unemployment it is a fairly good one; it was beaten in 1917, rate 82; and equalled in 1912; with these exceptions it is much the lowest rate we have had. Table No. 10

shows the East rate 100, the same as in 1912 and 1917, otherwise much the lowest recorded; it is a fair rate for the District, especially under prevailing conditions. The West rate, 71, is the best record except for 67 in 1917; it is a fairly good rate.

The chief causes of Infant deaths during the year were as follows:—

			EAST.		WEST.
Infectious Diseases	...	...	8	...	10
Tubercular Diseases	...	..	4	...	—
Convulsions	...	...	3	...	10
Respiratory Diseases	...	...	45	...	24
Diarrhœa	...	...	11	...	10
Malformation	...	...	6	...	8
Premature Birth	...	...	35	...	32
Debility, &c.	...	...	18	...	15
Accidents	...	...	3	...	2
Other causes	...	...	4	...	5
Total	...	...	137	...	116

The general death-rate (see Table No. 9), 13·4, is very moderate; it was only beaten in 1917 by 0·1. For the Sub-districts (see Table No. 10) the East rate, 16·9, was only beaten in 1912, 16·6; and in 1917, 16·0; The West rate, 11·2, is the lowest on record, and a very moderate death-rate. Table No. 8 gives some details for the Borough; Zymotic deaths are low, but have frequently been less; the early prevalence of Measles and Whooping Cough, although both slight, have raised this return. Phthisis deaths are low; Respiratory deaths are moderately high. Deaths of old persons are a minimum; deaths of infants moderate (but really low when the high birth-rate is taken into account); deaths of young children are very low, and a minimum record.

The following Table gives a few comparisons with the 96 great towns (populations exceeding 50,000):—

	Birth Rate	DEATH RATE.							Infant Death Rate
		All Causes	Enteric Fever	Small-Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	
96 Towns ..	26·2	12·5	0·01	0·00	0·22	0·04	0·14	0·16	85
Wolverhampton	30·2	13·4	..	..	0·37	0·07	0·22	0·03	87

Table No. 6 gives the quarterly and annual figures for the Sub-districts and the Borough. The chief interest in this Table is the contrast between the Sub-districts. Where figures other than rates are concerned they should be corrected for the populations, in the last four items below the West figures are reduced in the second column in proportion to the East population.

				EAST.			WEST.	
						Reduced.		Actual.
Birth-rate	...	...	38.1	...	—	...	25.4	
Infant death-rate	...	...	100	...	—	...	71	
General death-rate	...	...	16.9	...	—	...	11.2	
Zymotic death-rate	...	...	1.2	...	—	...	0.8	
Deaths, 65 years and upwards			148	...	120	...	217	
„ 1—5 years	...	...	60	...	25	...	42	
„ Phthisis	...	...	47	...	25	...	42	
„ Respiratory Diseases			186	...	83	...	138	

The contrast is between a district mostly poor, and one but little so ; as far as sanitation goes the difference is almost altogether due to comparative poverty, both of tenants and property owners.

Sanitary Condition of the Borough and Work done during the Year.

After the full description of the district given in the Annual Report for 1919 it is needless to recapitulate the general facts as to our condition and our methods of work. The endeavour to overtake the accumulation of arrears due to war and its sequence has produced an unprecedented increase in the work of the Inspectorial Department, and this is the outstanding feature in the year's records.

The total number of complaints received from the public was only one half of the average of twenty years ago. This is a witness to an improved sanitary condition.

The total number of Inspections made was 62,267 ; the highest previous record was in 1915, the first year of the war, before the members

of our staff had joined up, and when our work, including pail-closet conversion, was in full swing, it was 58,359. The number of defects detected in 1915 was a maximum, being 7,216; this figure was exceeded in 1919, 7,615 defects being recorded, but the present year's figure is *more than double this*, 15,268. This is evidence of the defective condition which we had necessarily got into, and of the supreme effort made to better it.

The number of Notices served yearly since 1915 were 4,067; 2,571; 2,899; 3,035; 5,244, and 8,468. In 1915 there were an immense number of improvements effected in connection with pail-closet conversions outside the work done under ordinary Notice; these improvements included the closet conversion, provision of ash bin, and drainage improvements. Exclusive of these the improvements in 1915 were a maximum, amounting to 11,555. In spite of labour difficulties, and lack of materials, which were a serious hindrance, the similar improvements effected in 1920 were 13,429. In addition to these, 520 ash-bins were provided, and 827 drains were repaired or re-constructed.

In June, in order to reduce the excessive clerical labour, the issue of preliminary intimation notices was discontinued; the Statutory Notice being served direct; this further effected a considerable saving in stationery and postage.

Pail-closet conversion work was only resumed towards the close of the year, only 26 conversions were carried out.

There was great difficulty in getting Notices complied with, mainly owing to lack of labour and materials; in consequence there was a great increase in prosecutions—there were 54 in the year; the previous ten years' average was 12. Nearly every prosecution involves adjournments and re-inspections, the extra work thrown on the Chief Inspector, who has carried out the prosecutions, has been excessive.

In only one direction has progress been impossible, our work in House closure still remains at a standstill for the lack of housing accommodation, we have been held up since 1917, though the need for work in this direction is very great.

The Inspector under the Sale of Food and Drugs Act submits the following report as to Creams.

Sample No.		Percentage of Fat.		Percentage of Boric Acid.		Preserved Cream.
A.U. 119	...	48.33	...	0.20	...	do.
A.Y. 75	...	42.04	...	0.32	...	do.
„ 76	...	64.14	...	0.34	...	do.
„ 78	...	56.46	...	0.30	...	do.
„ 79	...	71.70	...	0.36	...	do.
„ 80	...	65.50	...	0.30	...	do.
„ 77	...	43.59	...	No preservative	}	Sterilized Cream

In each instance preserved cream correctly labelled. No thickening substance in any of above samples. No proceedings for obstructing Inspector.

Welfare Work.

INFANT CLINICS, 1920.

	West.		East.		North.
No. on Books	... 1,200	...	1,089	...	960
New Cases	... 351	...	353	...	384
Attendances	... 2,614	...	2,290	...	2,329
Maximum attendances	86	...	91	...	81
Minimum „	18	...	17	...	12
No. of Clinics	... 48	...	48	...	48
Average attendance	54.5	...	47.7	...	48.5

The attendances are overwhelming ; to relieve the special pressure in the West a second Clinic was opened in that area in December.

Report of the Inspector of Midwives.

Year ending December, 1920.

No. of Midwives on Register	...	...	42
No. of Trained Midwives working independently	...	11	} 42
No. of Trained Midwives in Institutions...	...	10	
No. of Untrained Midwives working independently	...	21	

No. of Routine visits to Midwives	...	...	...	560
No. of Ante-natal visits	...	...	...	38
No. of Special visits to Mothers and babies, etc.	...	...	...	149
Total visits				<u>747</u>

Notifications received from Midwives :—

No. of Births attended	...	...	2.445
(a) Sending for Medical help	...	...	280—11.44%
(b) Still-births	...	...	59—2.04%
(c) Ophthalmia Neonatorum...	...	...	15—6.1%
(d) Artificial feeding	...	...	12—4.9%
(e) Death of child before the attendance of Medical Practitioner			3

Of the cases of Ophthalmia reported, 14 recovered. One died, but had lost the sight of one eye. 144 visits were paid to these cases.

Four cases of Puerperal Fever were notified—two in the practice of trained midwives—two in the practice of untrained. Two were fatal—one in the practice of a trained midwife—one in the practice of an untrained midwife

Visits paid by the Health Visitors :—

	Primary visits.	Re-visits.	Toddlers, etc.	Total.
East district ...	1,211	1,963	791	3,965
West district ...	1,276	1,747	1,015	4,038
Visits to cases of Ophthalmia Neonatorum				144
Total				<u>8,147</u>

No. of visits paid (in their own homes) to mothers and babies who attend clinics, by the order of the Medical Officer of the Welfare Centres, 1,642. These visits are to ensure that the mothers understand the instructions given by the Doctor and to help the mothers to carry them out. These figures are included in the grand total.

MAUD CARTER, M.I.H.,

Cert. Medical and Surgical Nurse,

C.M.B. Certificate.

INDEX TO TABLES.

- No. 1.—Cases of Small Pox, Scarlet Fever, Diphtheria, and Enteric Fever recorded during the year.
- „ 3.—Weekly Returns under the Infectious Diseases Notification Act, &c.
- „ 4.—Weekly Meteorological Returns.
- „ 5.—Weekly Returns of certain Deaths in the Sub-Districts.
- „ 6.—Quarterly Births and Deaths in the Sub-Districts and Borough.
- „ 7.—Deaths in the Sub-Districts during the year, classified according to Ages and Diseases.
- „ 7b.—Causes of, and ages at death during the year.
- „ 8.—Eleven years' Annual Returns of Deaths from various diseases in the Borough.
- „ 9.—Statistics for the Borough for 40 years.
- „ 10.—Statistics for the Sub Districts for 37 years.

Tables 2 and 7a are omitted.

Table No. 1.

Cases of Infectious Diseases recorded in 1920.

	EAST SUB-DISTRICT. POPULATION, 36,155.					WEST SUB-DISTRICT. POPULATION, 60,569.					BOROUGH. POPULATION, 96,396.					TOTALS.			RATE PER 10,000 OF POPULATION.		
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year	East Sub-District	West Sub-District	Borough	East Sub-District	West Sub-District	Borough
Small Pox ..	7	6	9	11	33	11	5	3	18	37	18	11	12	29	70	..	..	..	..	..	..
	15	36	20	25	96	42	18	16	30	106	57	54	36	55	202	129	143	272	35.7	23.6	28.2
Scarlet Fever	1	1	..	1	3	..	..	1	1	2	1	1	1	2	5	..	..	..	6.1	4.1	5.0
	3	3	10	3	19	3	8	5	7	23	6	11	15	10	42	22	25	47	..	0.3	0.2
Diphtheria ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..
Enteric Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	0.3	0.2
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..

Table No. 3.

WEEKLY RETURNS under the Infectious Diseases Notification Act, &c.

1920.		Scarlet Fever.	Diphtheria	Enteric Fever.	Puerperal Fever.	Phthisis.	Ophthalmia.	Cerebro- Spinal Meningitis	Acute Polio- myelitis.	Primary Pneumonia	Influenzal Pneumonia.	Encephalitis Lethargica.
Week ending.												
January	3rd..	2	..	..	..	5	..	..	..	2	..	..
"	10th..	7	1	..	..	6	..	..	..	3	..	..
"	17th..	1	..	..	..	..	..	..	..	3	..	..
"	24th..	3	..	..	..	11	1	..	..	5	..	..
"	31st..	10	..	1	..	10	..	..	..	1	2	..
February	7th..	10	1	..	..	8	..	..	..	1	..	..
"	14th..	9	..	..	..	8	..	..	..	..	1	..
"	21st..	4	..	..	..	7	..	..	..	..	2	..
"	28th..	9	2	..	1	1	1	..	..	..	..	..
March	6th..	3	..	..	..	6	..	..	..	..	..	..
"	13th..	6	1	..	..	7	..	..	..	1	2	..
"	20th..	9	..	..	..	11	..	..	..	2	2	..
"	27th..	5	..	..	..	1	..	..	..	5	2	..
April	3rd..	3	2	..	..	6	..	..	..	3	..	..
"	10th..	6	..	..	..	3	..	..	..	..	1	..
"	17th..	7	..	..	..	4	..	..	..	1	2	..
"	24th..	8	1	..	..	7	..	..	..	1	..	..
May	1st..	7	1	..	..	3	..	..	..	3	..	..
"	8th..	4	1	..	..	5	1	..	..	1	..	..
"	15th..	4	3	..	..	5	1	..	..	2	..	..
"	22nd..	3	..	..	..	5	..	..	..	..	..	..
"	29th..	3	1	..	..	3	..	1	..	1	..	..
June	5th..	3	1	..	..	6	..	1	..	2	..	..
"	12th..	6	2	..	..	4	1	..	..	..	..	..
"	19th..	8	1	..	..	4	..	..	..	..	..	..
"	26th..	8	1	..	..	1	..	1	..	..	..	..
July	3rd..	5	..	..	..	3	..	..	..	1	..	..
"	10th..	5	..	..	..	3	..	..	..	4	..	..
"	17th..	2	1	..	..	1	..	..	..	..	..	..
"	24th..	2	1	..	..	..	..	..	..	2	2	..
"	31st..	2	1	..	1	2	..	..	..	1	..	..
August	7th..	4	1	..	..	5	..	..	..	..	..	..
"	14th..	7	1	..	..	5	..	..	..	..	..	..
"	21st..	4	1	..	..	2	..	1	..	1	4	..
"	28th..	4	4	..	..	5	2	..	..	..	..	..
September	4th..	1	3	..	..	4	3	..	..	..	..	..
"	11th..	4	1	..	..	4	..	..	..	2	..	..
"	18th..	5	1	..	..	..	..	..	..	2	..	..
"	25th..	4	..	..	..	2	1	..	..	..	..	..
October	2nd..	5	1	..	..	6	..	..	..	..	..	..
"	9th..	8	..	..	1	2	1	..	..	2	..	..
"	16th..	7	3	..	..	6	..	..	..	2	..	..
"	23rd..	7	1	..	..	4	..	..	..	3	..	..
"	30th..	3	1	..	..	4	..	..	..	..	..	..
November	6th..	6	..	..	..	5	..	..	..	2	..	..
"	13th..	13	..	..	..	6	..	..	..	2	..	..
"	20th..	7	4	..	..	3	..	..	..	2	..	..
"	27th..	7	2	..	..	2	..	..	..	1	..	..
December	4th..	8	1	..	..	..	2	..	..	1	..	..
"	11th..	5	..	..	1	6	..	..	..	1	..	..
"	18th..	1	..	..	..	3	..	..	..	..	..	..
"	25th..	5	1	1	..	2	..	..	..	..	..	..
Jan. 1st/1921..		7	1	..	..	3	..	..	..	1	..	1
YEAR	..	286	49	2	4	225	14	4	..	67	20	1

This Table, 3, does not tally with Tables 1 and 2, these including a few cases not reported by doctors, and Table 3 including some cases which ultimately proved incorrect.

Table No. 4.

Weekly Meteorological Report, from observations taken at 9 a.m. daily.

Week ending.	BAROMETER REDUCED TO 32° AND SEA LEVEL.		Humidity.	TEMPERATURE.					Rain.	WIND.
	Mean.	Range		Max.	Min.	Mean.	Earth.			Prevailing Directions.
							1 ft.	4 ft.		
1920	in.	in.	0-100	°	°	°	°	°	in.	
January 10th	29.856	1.339	82	51.8	23.0	36.3	38.4	43.4	.69	NE, NW
„ 17th	29.886	1.619	87	54.5	33.0	45.3	41.0	43.1	.61	SW
„ 24th	30.002	.509	89	53.7	34.0	42.7	42.0	43.7	.28	SW
„ 31st	29.735	.552	86	50.3	31.5	40.4	40.0	43.6	1.14	SW
February 7th	30.441	.328	86	51.0	27.5	40.9	40.8	43.2	.09	SW
„ 14th	29.984	.675	87	51.8	36.0	43.2	41.0	43.1	.25	SW
„ 21st	29.950	.428	90	60.0	32.0	42.6	42.4	43.6	.82	SW, NE
„ 28th	30.209	.527	88	50.4	29.2	39.3	40.4	43.5	.07	NE, SW
March 6th	30.092	.810	87	62.0	31.2	44.5	42.3	43.5	.07	SW
„ 13th	30.001	.882	86	48.4	26.0	37.1	41.6	43.7	.25	NW
„ 20th	29.768	1.740	81	62.5	31.6	42.7	41.5	43.4	.91	NW
„ 27th	29.970	.869	79	62.6	36.8	47.1	44.7	44.2	.40	SW
April 3rd	29.534	.355	89	62.8	38.9	46.8	46.6	45.2	.57	SW, NE
„ 10th	29.739	.472	87	58.0	37.0	43.5	45.8	45.7	1.09	NE, SE
„ 17th	29.320	.779	86	56.2	41.5	47.2	47.3	46.0	1.74	SE, SW
„ 24th	29.896	.771	85	61.5	37.1	46.6	47.1	46.4	.71	SW, NW
May 1st	29.826	.347	70	56.0	35.8	44.2	48.5	47.0	.39	NW
„ 8th	30.014	1.116	75	59.0	42.4	48.7	48.9	47.4	.37	NW, SW
„ 15th	30.109	.617	70	66.8	41.0	51.0	50.0	48.0	.70	SW, E
„ 22nd	29.930	.879	75	67.7	41.2	50.3	51.2	48.6	.24	SE, SW
„ 29th	30.013	.419	80	78.7	44.8	59.9	56.6	50.2	1.34	SE
June 5th	30.194	.426	80	70.8	37.5	53.3	56.4	52.3	.57	N, NE
„ 12th	29.975	.314	71	65.2	39.8	51.6	56.2	53.2	.40	SE
„ 19th	29.940	.171	81	75.5	49.2	57.4	58.1	53.4	2.20	SE
„ 26th	30.123	.553	73	69.2	45.5	56.9	59.0	54.1	.33	SW, N
July 3rd	29.801	.469	80	68.5	48.8	55.9	58.9	54.7	.77	SW
„ 10th	29.809	.418	86	62.5	47.0	51.6	56.5	54.5	1.73	S, SW
„ 17th	29.941	.398	82	68.0	51.0	56.4	57.2	54.2	.48	SW
„ 24th	29.943	.750	79	70.9	47.3	56.5	58.9	54.9	.52	NW, SW
„ 31st	29.906	.446	79	69.9	42.5	54.2	57.6	55.1	.85	NW, SW
August 7th	29.801	.644	75	65.3	48.0	54.6	57.9	55.1	.41	SW, NW
„ 14th	30.153	.356	86	71.7	46.4	56.3	58.2	55.1	.60	N, NW
„ 21st	30.041	.463	81	71.8	42.8	54.4	58.9	55.6	.08	NW
„ 28th	30.218	.394	82	70.5	45.5	54.4	57.1	55.4	.25	N, NE
Septem. 4th	30.158	.644	87	66.2	44.0	53.4	57.5	55.5	.31	E, SW
„ 11th	30.113	.372	75	69.0	45.0	56.7	58.0	55.2	.21	NW
„ 18th	29.832	.701	84	72.8	44.0	53.9	56.7	55.3	1.42	NW, SW
„ 25th	30.101	.644	85	64.6	37.8	50.0	53.8	54.5	.82	E, SE
October 2nd	30.010	.812	92	67.0	42.5	54.8	54.4	53.8	.27	SE, SW
„ 9th	29.834	.637	91	68.7	44.0	56.6	54.1	53.5	1.72	SE
„ 16th	30.009	.339	88	62.0	46.6	54.5	54.0	53.6	1.03	SE
„ 23rd	30.106	.282	91	56.4	32.5	47.0	50.8	52.7	.47	SE
„ 30th	30.222	.481	93	55.5	37.0	44.9	47.7	51.7	..	SE
Novem. 6th	29.806	.894	93	49.5	30.6	41.2	46.4	50.2	.40	NE
„ 13th	30.215	.556	91	56.4	37.0	47.4	46.7	49.3	.09	SSW
„ 20th	30.072	.815	90	58.5	36.0	46.8	46.5	49.1	.24	SSW
„ 27th	30.113	.729	91	51.5	28.3	39.1	43.9	48.2	.03	SE, SW
Decem. 4th	29.940	.379	87	54.0	37.0	44.8	45.7	47.6	.52	SW, NE
„ 11th	30.296	.395	96	44.8	28.3	35.5	43.2	47.0	.04	NE, SE
„ 18th	30.262	.319	*	36.0	12.9	29.0	40.4	45.8	.22	E, NE
„ 25th	30.075	.860	92	53.0	32.0	43.7	40.7	44.9	.62	E, SW
Jan. 1st/1921	29.796	.523	90	54.2	42.5	46.9	43.9	44.9	1.16	SW

Total rainfall 31.49 inches.

* Wet bulb frozen.

TABLE No. 5.—Weekly Returns of Deaths in the Sub-Districts.

[illegible]

Table No. 6.—Quarterly Births and Deaths during 1920.

Quarters		East Sub-District, 36,155.					West Sub-District, 60,569					Borough, 96,396.				
		1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year
		1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year
BIRTHS	Males ...	212	153	148	182	695	205	208	197	158	768	417	361	345	340	1463
	Females ...	175	183	162	157	677	229	183	184	168	764	404	366	346	325	1441
	Total ...	387	336	310	339	1372	434	391	381	326	1532	821	727	691	665	2904
	Rate ...	43.0	37.3	34.4	37.6	38.1	28.1	25.9	25.2	21.6	25.4	34.2	30.3	28.8	27.6	30.2
DEATHS	Males ...	99	77	74	85	335	84	93	81	77	335	183	170	155	162	670
	Females ...	90	63	61	61	275	103	71	86	82	342	193	134	147	143	617
	Total ...	189	140	135	146	610	187	164	167	159	677	376	304	302	305	1287
	Rate ...	21.0	15.5	15.0	16.2	16.9	12.4	10.9	11.1	10.5	11.2	15.7	12.7	12.6	12.7	13.4
	65 years & upwards	37	27	35	49	148	52	48	53	64	217	89	75	88	113	365
	Under 1 year	37	41	35	24	137	32	32	31	21	116	69	73	66	45	253
	1—5 years	26	19	7	8	60	9	19	10	4	42	35	38	17	12	102
	Zymotics (7)	18	10	11	5	44	12	20	14	4	50	30	30	25	9	94
	Rate ..	2.0	1.1	1.2	0.6	1.2	0.8	1.3	0.9	0.3	0.8	1.2	1.2	1.0	0.4	1.0
	Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	7	4	2	...	13	...	13	...	...	...	...	17	11	...	...
	Scarlet Fever	2	1	1	...	4	3	...	...	...	3	5	1	1	...	36
	Whooping Cough	6	1	4	1	12	4	5	...	...	9	10	6	4	1	7
	Diphtheria	1	...	...	1	2	...	1	...	...	1	1	1	...	1	21
	Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
	Diarrhoea	2	4	4	3	13	4	1	5	4	14	6	5	9	7	...
	Influenza	6	2	1	2	11	13	1	1	4	19	19	3	2	6	27
	Phthisis	11	12	12	12	47	13	11	11	7	42	24	23	23	19	30
	Respiratory Diseases	60	53	29	44	186	44	34	17	43	138	104	87	46	87	89
	Uncertified	...	...	...	...	...	1	...	...	...	1	1	...	...	...	324
	Inquests	13	9	17	16	55	9	7	13	11	40	22	16	30	27	1
Deaths in		General Hospital					...					...				
Public Institutions		{					...					...				
		Borough Infectious Hospital					...					...				
		Other Institutions					...					...				
Non-residents in the Borough (excluded from our Tables)		...					...					...				
Borough Residents dying outside (included in our Tables)		...					...					...				

Table No. 7.

DEATHS in the Sub-Districts during 1920, classified according to Ages and Diseases.

No.	DISEASES.	EAST SUB-DISTRICT.										WEST SUB-DISTRICT.									
		AGES.										AGES									
		0—	1—	2—	5—	15—	25—	45—	65—	75—	All ages	0—	1—	2—	5—	15—	25—	45—	65—	75—	All ages
	ALL CAUSES	137	32	28	20	30	74	141	80	68	610	116	26	16	26	33	71	172	101	116	677
6	Measles ..	2	5	5	1	..	..	..	..	..	13	5	13	4	1	..	..	..	..	..	23
7	Scarlet Fever ..	..	..	2	2	..	..	..	..	..	4	..	..	1	..	1	1	..	..	..	3
8	Whooping Cough ..	5	3	3	1	..	..	..	..	..	12	4	2	2	1	..	..	..	..	..	9
9	Diphtheria ..	..	..	..	2	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	1
10	Influenza ..	1	..	1	..	1	4	2	1	1	11	1	..	1	1	1	5	6	3	1	19
18	Erysipelas ..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	3
20	Pyæmia ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
28, 29	Pulmonary Tuberculosis	..	..	..	..	9	21	15	1	1	47	..	..	..	..	11	18	11	2	..	42
30	Tuberculous Meningitis..	3	..	2	1	..	..	..	..	..	6	..	1	..	..	..	..	..	..	..	1
31	Abdominal Tuberculosis..	1	..	1	..	..	..	..	..	..	2	..	2	..	1	2	..	..	..	..	5
32, 33	Tuberc. of Bones & Joints	..	..	..	..	1	..	1	..	..	2	..	..	..	2	..	..	2	..	..	4
34, 35	Other Tuberculosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
36	Rickets ..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
37	Syphilis ..	1	..	..	..	..	..	1	..	..	2	1	..	..	..	1	2	..	..	..	4
39-45	Cancer ..	..	..	..	..	4	25	7	5	41	..	..	..	..	..	5	39	17	8	69	
46	Other Tumours	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
47	Rheumatic Fever	..	..	..	1	..	..	..	..	..	1	..	..	..	3	..	..	..	..	..	3
49	Scurvy ..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
50	Diabetes ..	..	..	..	..	3	3	1	..	7	..	..	..	1	..	1	2	..	2	..	6
51	Ex-Oph. Goitre	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2
54	Anemia, etc. . .	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	..	..	3
55	Purpura Hæmorrh.	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
61a	Cerebro-spinal Fever	..	..	..	..	..	..	..	..	..	..	..	..	1	3	..	..	..	..	..	4
61b-c	Meningitis ..	1	..	..	1	..	..	..	..	..	2	..	1	1	1	..	1	..	..	..	4
62, 63	Dis. of Spinal Cord	..	..	..	..	1	..	1	..	..	2	..	..	..	..	1	1	1	2	..	5
64	Apoplexy ..	..	..	..	..	1	10	8	7	26	..	..	..	..	..	2	11	13	12	38	
65, 66	Other Paralysis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	2	
67, 68	Insanity ..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..	..	..	1	
69	Epilepsy ..	..	..	..	1	..	2	..	..	3	..	..	..	..	1	2	1	..	..	4	
70, 71	Convulsions ..	3	..	..	..	..	..	..	..	3	10	..	..	..	..	..	..	..	..	10	
73, 74	Other Nervous Diseases..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	
76	Ear Diseases..	..	..	..	1	..	..	..	..	1	..	1	..	1	..	..	..	..	..	2	
77	Pericarditis ..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	
78	Acute Endocarditis	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	..	3	
79	Other Heart Disease	..	..	..	4	3	5	14	4	1	31	..	..	2	1	8	28	11	8	58	
81	Disease of Arteries	..	..	..	..	..	1	..	..	1	..	..	..	..	..	2	..	..	..	2	
82	Embolism, Thrombosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	
87	Laryngitis ..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	
89, 90	Bronchitis ..	22	6	3	..	6	30	14	18	99	14	3	2	..	..	1	17	26	22	85	
91, 92	Pneumonia ..	23	15	7	2	4	12	11	4	3	81	10	1	..	3	4	7	16	6	3	50
93	Pleurisy ..	..	..	..	..	1	..	1	1	..	3	..	..	..	..	1	..	..	..	1	
94, 98	Other Respiratory Dis.	..	..	..	..	1	..	2	..	3	..	..	..	..	..	..	..	1	..	1	

TABLE No. 7 (continued).

No.	DISEASES.	EAST SUB-DISTRICT.										WEST SUB-DISTRICT.									
		AGES.										AGES.									
		0—	1—	2—	5—	15—	25—	45—	65—	75—	All ages	0—	1—	2—	5—	15—	25—	45—	65—	75—	All ages
101	Stricture of Æsophagus..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	1	..	..	1
102	Gastric Ulcer ..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	..	1	2
103	Gastritis, etc. ..	..	1	..	..	..	..	..	1	..	2	2	..	..	..	..	..	1	..	..	3
104-5a	Infective Enteritis ..	8	..	1	..	..	..	..	..	..	9	2	..	..	..	..	..	..	..	..	2
104-5b-c	Enteritis Diarrhœa ..	2	..	..	..	..	..	..	..	1	3	6	..	..	..	1	..	..	..	3	10
104-5d	Gastro Enteritis ..	1	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	2
104-5g	Ulcerative Colitis ..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
108	Appendicitis ..	..	..	..	..	1	1	1	..	..	3	..	..	..	1	..	..	1	..	..	2
109a-b	Hernia, Obstruction ..	..	..	1	1	..	..	..	1	..	3	..	..	..	..	..	..	2	1	1	4
113a-b	Cirrhosis of Liver ..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	2	1	..	3
119-20	Nephritis ..	..	..	..	..	1	1	3	2	..	7	..	..	..	1	1	3	8	3	1	17
122	Pyonephrosis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
124-6	Dis. of Bladder or Prostate ..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	2	2
130	Pelvic Cellulitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
131	Ovarian Cyst, etc. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
134	Accidents of Pregnancy ..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
135	Puerperal Hæmorrhage ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	2
137	Puerperal Fever ..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	1
139-41	Other Puerperal Dis. ..	..	..	..	..	1	1	..	..	..	2	..	..	..	..	..	2	..	..	..	2
142a	Senile Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
142b-c-d	Other Gangrene ..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..
143-4	Boil, Abcess ..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
145	Skin Diseases ..	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1
146-9	Dis of Bones and Joints ..	..	..	..	1	..	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..
150	Congenital Malformations ..	6	..	..	..	..	..	..	..	..	6	8	..	..	..	..	..	..	..	..	8
151a	Premature Birth ..	35	..	..	..	..	..	..	..	..	35	32	..	..	..	..	..	..	..	..	32
151b-e	Debility, Marasmus ..	15	..	1	..	..	..	..	..	..	16	13	..	..	..	..	..	..	..	..	13
151a-d	Atelectasis, Injury, etc. ..	3	..	..	..	..	..	..	..	..	3	2	..	..	..	..	..	..	..	..	2
154	Old Age ..	..	..	..	..	..	..	5	28	27	60	..	..	..	..	..	..	1	13	48	62
155-63	Suicide ..	..	..	..	..	..	..	3	..	..	3	..	..	..	..	..	1	3	1	..	5
ACCIDENTS.																					
164-5	Poisoning ..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..
167	Burns ..	..	1	2	1	1	..	..	..	1	6	..	1	2	1	..	..	..	..	..	4
168	Suffocation ..	..	1	..	..	..	..	1	..	..	2	2	..	..	..	..	..	..	..	..	2
169	Drowning ..	..	..	..	..	..	2	..	..	..	2	..	..	..	..	..	1	..	..	..	1
172	Fall ..	..	1	..	..	..	1	1	1	1	5	..	..	..	..	1	..	1	..	..	2
173-4	Industrial ..	..	..	..	..	5	..	..	1	..	6	..	..	..	1	..	..	1	1	..	3
175	Vehicles and Railways ..	..	..	..	1	..	..	1	1	..	3	..	..	1	1	1	1	2	..	..	6
176-81	Other Accidents ..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
185-6	Other Violence ..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..
187-9	Not specified, or ill-defined ..	..	..	..	..	..	2	4	1	1	8	..	..	..	..	2	3	..	..	..	5

Table No. 7b. (TABLE III, L.G.B.)

Deaths in the Borough during 1920 classified according to Ages and Diseases

[illegible]

Table No. 8.—Eleven Years' Annual Deaths, &c.

	1910	1911	1912	* 1913	1914	1915	1916	1917	1918	* 1919	1920	A
Small Pox ...	...	...	1	...	...	...	...	...	...	1	...	0.2
Measles ...	18	66	11	79	11	130	51	16	14	7	36	40.3
Scarlet Fever ...	4	5	7	2	5	2	3	5	5	4	7	4.2
Whooping Cough ...	28	9	21	15	17	11	15	18	14	9	21	15.7
Diphtheria ...	4	5	12	7	18	15	17	7	5	2	3	9.2
Enteric Fever ...	1	2	1	4	3	1	...	...	...	...	..	1.2
Diarrhoea ...	15	99	30	118	91	49	62	32	28	46	27	57.0
Seven Zymotics ...	70	186	83	225	145	208	148	78	66	69	94	127.8
Rate per 1,000 ...	0.7	2.0	0.9	2.3	1.5	2.2	1.5	0.8	0.7	0.7	1.0	1.33
Phthisis ...	77	105	75	124	111	113	105	101	112	109	89	103.2
Respiratory Diseases ...	230	263	265	313	360	396	311	295	431	427	324	329.1
65 years and upwards ...	375	381	399	374	415	419	403	429	396	481	365	407.2
Under 1 year ...	253	331	211	334	295	317	238	165	202	214	253	256.0
1—5 years ...	123	186	108	200	125	233	156	115	180	127	102	155.3

* These years contain 53 weeks.

A—Annual Averages for the ten years preceding 1920.

Table No. 9. (INCLUDES TABLE I, L.G.B.)

Vital Statistics during 1920 and 39 previous years.

YEAR.	Popula- tion estimated to middle of each year.	BIRTHS.		DEATHS BELONGING TO THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE DISTRICT.	Deaths of Non- residents registered in the District.	Deaths of Residents occurring outside the District.	TOTAL DEATHS REGISTERED IN THE DISTRICT.	
		No.	Rate.	Under 1 year of age.		At all Ages.					No	Rate
				No.	Rate per 1,000 Births	No.	Rate.					
1	2	3 & 4	5	10	11	12	13		8	9	6	7
*1881	75,932	2769	35·9	410	148	1552	20·1	272	96	..	1648	21·3
Averages for years 1881-1890	78,992	2738	34·6	452	165	1638	20·7	306	113	..	1750	22·1
Averages for years 1891-1900	88,011	2977	33·9	582	195	1866	21·2	379	137	..	2002	22·8
Averages for years 1901-1910	94,728	2782	29·4	385	138	1485	15·7	†282	132	99	1518	16·0
1911	95,357	2415	25·4	331	137	1515	15·9	263	153	186	1482	15·6
1912	95,472	2430	25·9	211	87	1280	13·5	269	150	184	1246	13·1
*1913	95,587	2590	26·7	334	129	1545	15·9	308	185	189	1541	15·9
1914	95,702	2610	27·4	295	113	1495	15·7	284	163	217	1441	15·1
1915	95,817	2381	24·9	317	133	1623	17·0	270	150	222	1551	16·2
1916	95,933	2298	24·0	238	104	1391	14·5	289	179	207	1363	14·3
1917	96,048	2009	21·0	165	82	1272	13·3	294	184	199	1257	13·1
1918	96,164	2095	21·9	202	97	1692	17·7	344	215	233	1674	17·5
*1919	96,280	2137	21·9	214	100	1541	15·8	326	199	224	1516	15·5
1920	96,396	2904	30·2	253	87	1287	13·4	310	199	188	1298	13·5

* These years contain 53 weeks. Area of District in Acres, 3,525.

CENSUS, 1911, Total Population at all ages, 95,328.

Institutions within the Borough receiving sick and infirm persons from without the Borough—
The Wolverhampton and Staffordshire General Hospital;
The Wolverhampton Borough Hospital;
The Wolverhampton and Midland Counties Eye Infirmary;
The Wolverhampton and District Hospital for Women;
The Queen Victoria Nursing Institution.

† Near the end of 1903 the Workhouse (receiving cases from a district nearly double the size of the Borough) was removed outside the Borough.

EAST SUB-DISTRICT.										WEST SUB-DISTRICT.										
Y EAR.	BIRTHS.			DEATHS.			Population estimated to middle of each year. <i>a</i>	BIRTHS.			DEATHS.			Population estimated to middle of each year. <i>a</i>	BIRTHS.			DEATHS.		
	Number. <i>b</i>	Rate.	Under 1 year of age.	Number. <i>c</i>	Rate.	Under 1 year of age.		Number. <i>b</i>	Rate.	Under 1 year of age.	Number. <i>c</i>	Rate.	Under 1 year of age.		Number. <i>b</i>	Rate.	Under 1 year of age.	Number. <i>c</i>	Rate.	Under 1 year of age.
1884	1382	35.8	275	981	25.4	199	38,748	1309	33.5	753	19.3	231	39,146	1304	31.7	748	18.2	191	154	
Averages for years 1884-1890	1418	36.4	263	916	23.5	186	38,876	1467	30.4	864	17.9	256	41,098	1527	28.0	764	13.8	183	119	
Averages for years 1891-1900	1510	38.2	326	991	25.3	216	39,621	1317	23.1	834	14.6	171	48,326	1316	23.0	653	11.4	102	78	
Averages for years 1901-1910	1255	31.8	202	721	18.3	160	39,445	1449	24.6	789	13.4	146	55,250	1373	23.6	797	13.7	132	96	
1911	1081	28.4	160	681	17.9	148	38,211	1298	22.2	854	14.6	138	57,150	1295	22.0	746	12.7	114	88	
1912	1095	28.9	109	627	16.6	100	37,977	1089	18.4	686	11.6	73	57,520	1105	18.5	903	15.2	91	82	
*1913	1128	29.4	188	756	19.7	167	37,744	1120	18.3	829	13.6	92	57,893	1120	18.3	829	13.6	92	82	
1914	1212	32.4	163	698	18.4	134	37,513	1532	25.4	677	11.2	116	58,268	1532	25.4	677	11.2	116	71	
1915	1064	28.6	179	769	20.7	126	37,283						58,645							
1916	1003	27.2	124	645	17.4	124	37,055						59,025							
1917	920	25.1	92	586	16.0	100	36,828						59,407							
1918	975	26.7	111	789	21.6	114	36,602						59,792							
*1919	1017	27.5	122	712	19.2	120	36,378						60,179							
1920	1372	38.1	137	610	16.9	100	36,155						60,569							
CENSUS, 1911							..	..	..	..	..	..	..	..	..	..	..	..	57,058	
							38,270	..	..	..	..	..	..	..	..	..	..	..		

At the beginning of 1903 the dividing line between the Sub-Districts was altered; the alteration affects the 1901 census by transferring 418 from the West population to the East.

* These years contain 53 weeks.

Chief Sanitary Inspector's Summary

— OF —

The Main Routine Work of the Several Inspectors.

FOR THE YEAR 1920.

The Columns show (1) the previous 5 years' average figures; (2) and (3) last and present year's figures, respectively.

PUBLIC COMPLAINTS OR REQUESTS RECEIVED		(1)	(2)	(3)
In respect of Sanitary defects	...	667	920	1029
„ „ Closet pans or ashes	...	486	989	451
INFECTIOUS DISEASE ENQUIRIES MADE		1874	1542	1920
INSPECTIONS AND RE-INSPECTIONS RECORDED		43024	46978	65031
SANITARY DEFECTS REPORTED		5351	7615	15273
NOTICES ISSUED	{ "Intimations"	2436	3510	3813
	{ Statutory	1127	1734	4655
SANITARY IMPROVEMENTS RECORDED		7649	6755	14816
TOTAL PREMISES IMPROVED		3324	3615	7385
DISINFECTION	{ Rooms, &c.	459	412	512
	{ Articles removed for	3576	2690	5869
DISEASED OR UNSOUND FOOD DESTROYED	{	Tons 36	6	5
	{	Cwts. 6½	19½	13¼
CANAL BOATS	{ Examined for Registration	...	2	2
	{ Inspections	...	144	125
	{ Contraventions	...	34	36
	{ Notices Issued	...	26	27
VETERINARY INSPECTION OF COWS		1085	1146	927
PROSECUTIONS		16	21	54

